

Application No. 09/846,065
Amendment dated December 17, 2003
Reply to Office Action of November 26, 2003

REMARKS

Claims 1-11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,073,010 to Johnson et al. (hereinafter, "Johnson"). As amended, claim 1 now calls for biasing a first plate of a spatial light modulator with alternating signals of a first polarity during a positive cycle of liquid crystal modulation and a second polarity during a negative cycle of liquid crystal modulation and biasing a second plate of said spatial light modulator with only the first polarity during both the positive and negative cycles of liquid crystal modulation. Support for these limitations may be found in Applicant's specification starting on page 3, lines 24 and in the abstract. Instead, Johnson teaches a device in which a single potential, i.e., AC is applied to both the first and second plates during the positive and negative cycles of liquid crystal modulation. That is, use of two separate biasing potentials for the top electrode and use of only one biasing potential for bottom electrode, is not taught or even remotely suggested by the Johnson reference.

However, as now claimed, for spatial light modulators, which may comprise high voltage modulation liquid crystal, appropriate modulation may be obtained by reducing the bias on silicon light modulators even with low power supply voltage. For example, during the negative frame, a positive bias voltage may be utilized and during the positive frame, a negative bias voltage may be utilized, by recognizing that the dynamic range of the modulation is much smaller than voltage on pixel electrode. Nonetheless, the Johnson reference fails to teach or suggest all the specific limitations in claim 1. Therefore, claim 1 is not anticipated. Accordingly, the Examiner is respectfully requested to reconsider the § 102 rejection of claim 1 and the claims depending therefrom because all of these claims are in condition for allowance.

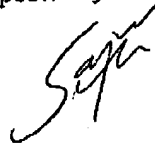
As amended, claim 7 calls for a spatial light modulator comprising a drive circuit to apply positive potential during a negative cycle of liquid crystal modulation and apply negative potential during a positive cycle of liquid crystal modulation to the top plate and to bias the pixel electrode with only a positive potential during both the positive and negative cycles of liquid crystal modulation. As set forth above in the context of claim 1, the limitations in claim 7 are

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not anticipated by the cited reference, i.e., the Johnson reference. In this manner, the Examiner is respectfully requested to allow claim 7 and the claims depending therefrom because they are patentably distinguishable over the cited art. The Examiner is respectfully requested to consider all pending claims.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested.

Respectfully submitted,



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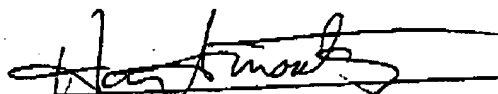
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Expires: January 14, 2004



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